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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,961	05/26/2000	Brantley W. Coile	13890060003	1023

36587 7590 12/02/2003

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EXAMINER

MOFIZ, APU M

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 12/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,961

Applicant(s)

COILE, BRANTLEY W.

Examiner

Apu M Mofiz

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37 and 38 is/are allowed.
- 6) ☒ Claim(s) 1-6, 12, 15-17, 20-25, 30, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10, 11, 13, 14, 18, 19 and 26-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

DIANE D. MIZRAHI
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 & 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6,12,15-17,20-25,30,33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowman-Amuah (U.S. Patent No. 6,578,068 and Bowman hereinafter).

As to claims 1,12,21 and 30, Bowman teaches a system for managing content across storage systems, the system comprising: (a) one or more storage systems containing data sets (Abstract; col 2, lines 18-57); and (b) one or more indexing systems (i.e. the utilization-based load balancer) (Abstract; col 2, lines 18-57), each indexing system comprising a data store (i.e. it keeps a listing of available server components and the server component, which is most appropriate to receive a particular request; the list can be kept in any conventional software storage system e.g. file, memory or database tables or any other established data structures e.g. list, stack, queue etc. and itself is not a patentable subject matter because tables, data structures are long established software options to store data) (Abstract; col 2, lines 18-57) for storing usage information associated with data sets stored on the one or more storage systems

(Abstract; col 2, lines 18-57) and a processor (i.e. both client and servers must have a processor to process anything) for performing the steps of: (i) tracking usage of the data sets contained on the one or more of storage devices (Abstract; col 2, lines 18-57); and (ii) issuing content management directives (i.e. managing/balancing the load/content) (Abstract; col 2, lines 18-57) with respect to the data sets so as to maximize efficient access to the data sets (Abstract; col 2, lines 18-57).

As to claims 2 and 20, Bowman teaches a communication network among the one or more storage systems and the one or more indexing systems (i.e. among the load balancer and the one or more server components) (Abstract; col 2, lines 18-57).

As to claims 3 and 22, Bowman teaches (A) monitoring a data set access request between an indexing system (i.e. the load balancer) and a storage device system (Abstract; col 2, lines 18-57); and (B) updating usage information (i.e. the load balancer keeps track of the utilization, number of requests for particular database/server and various other utilization calculation and must have updated information to select the most appropriate server component/database server/ webserver) associated with a data set corresponding to the monitored data set access request (Abstract; col 2, lines 18-57).

As to claims 4 and 23, Bowman teaches that the usage information in the data store is a table of records (i.e. it keeps a listing of available server components and the

server component, which is most appropriate to receive a particular request; the list can be kept in any conventional software storage system e.g. file, memory or database tables or any other established data structures e.g. list, stack, queue etc. and itself is not a patentable subject matter because tables, data structures are long established software options to store data) (Abstract; col 2, lines 18-57) correlating data sets with data set access request information (Abstract; col 2, lines 18-57).

As to claims 5,6,24 and 25, Bowman teaches that the data set access request information correlated with a data set is a request rate (i.e. the number of requests) associated with the data set (Abstract; col 2, lines 18-57).

As to claims 9 and 16, Bowman teaches that each storage system comprises a storage processor (Abstract; col 2, lines 18-57).

As to claims 11,17,19,29,34 and 36, Bowman teaches acknowledging processing of the received directive (i.e. sending acknowledgement is an inherent characteristic of any data communications protocol) (Abstract; col 2, lines 18-57).

As to claims 15 and 33, Bowman teaches that the management processor (i.e. the load balancer) performs the monitoring of data set access delegations (Abstract; col 2, lines 18-57).

Allowable Subject Matter

3. Claims 37 and 38 are allowed over the prior art of record.
4. Claims 7,8,10-11,13-14,18-19,26,27 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record Bowman-Amuah (U.S. Patent No. 6,578,068 and Bowman hereinafter) does not disclose, teach or suggest the claimed limitations of (in combination with all other features in the claims) a system for managing content across storage systems, which includes (a) one or more storage systems containing data sets; and (b) one or more indexing systems, each indexing system comprising a data store for storing usage information associated with data sets stored on the one or more storage systems and a processor for performing the steps of: (i) tracking usage of the data sets contained on the one or more of storage devices; and (ii) issuing content management directives with respect to the data sets so as to maximize efficient access to the data sets wherein the storage processor of a storage system performs the steps, which includes (i) receiving a content management directive from the one or more indexing systems; and (ii) manipulating a data set on the storage system based upon the received directive as claimed in claims 7,8,10,13,18,26,27,28.

Points of Contact

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Apu M. Mofiz whose telephone number is (703) 605-4240. The examiner can normally be reached on Monday – Thursday 8:00 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached at (703) 3053830. The fax numbers for the group is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Apu M. Mofiz
Patent Examiner
Art Unit 2175

DIANE D. MIZRAHI
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100

November 24, 2003